

Docket No.: 1875.1004 (formerly 121.1053)

Serial No. 10/634,830

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 5-15 in accordance with the following:

1. (PREVIOUSLY PRESENTED) A method of driving a plasma display panel including a plurality of X electrodes and a plurality of Y electrodes arranged in alternating, spaced relationship on a base plate, and a plurality of address electrodes spaced from and crossing the X and Y electrodes, comprising:

generating initializing discharges with at least one ramp waveform voltage applied between the X electrodes and Y electrodes during an initializing period;

generating addressing discharges between the Y electrodes and the address electrodes during an addressing period; and

generating sustaining discharges between the X electrodes and Y electrodes during a sustaining period, said initializing period, said addressing period and said sustaining period cyclically recurring,

wherein the voltage of a driving waveform for each electrode satisfies the following relational expression:

$$2V_{iAY} - V_{iXY} \leq 2V_{AY} - V_{XY} - 2V_{\text{aoff}},$$

wherein V_{iAY} denotes a discharge starting threshold voltage between the address electrodes and the Y electrodes, and V_{iXY} denotes a discharge starting threshold voltage between the X electrodes and the Y electrodes, when the Y electrodes serve as cathodes,

wherein V_{AY} denotes a voltage applied between the address electrodes and the Y electrodes, and V_{XY} denotes a voltage applied between the X electrodes and the Y electrodes, at the trailing edge of the ramp waveform at the end of the initializing period, and

wherein V_{aoff} denotes an offset voltage of the voltage applied between the address electrodes and the Y electrodes at the end of the sustaining period.

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2. (PREVIOUSLY PRESENTED) The method of driving a plasma display panel according to claim 1, wherein, when a driving waveform having two or more types of offset voltages V_{aoff} is used in the sustaining period, the plasma display panel is driven by setting the voltage of the driving waveform so as to satisfy the relational expression at the end of the sustaining period.

3. (PREVIOUSLY PRESENTED) The method of driving a plasma display panel according to claim 1, wherein, when a driving waveform having an alternating voltage with two or more types of amplitudes is used as a driving waveform to be applied between the address electrodes and the Y electrodes in the sustaining period, the plasma display panel is driven by setting the voltage of the driving waveform so as to satisfy the relational expression at the end of the sustaining period.

4. (PREVIOUSLY PRESENTED) The method of driving a plasma display panel according to claim 1, wherein, when the address electrodes serve as a cathode, V_{tXY} denotes a discharge starting threshold voltage between the X electrodes and the address electrodes, and V_{tYA} denotes a discharge starting threshold voltage between the Y electrodes and the address electrodes,

when the X electrodes serve as a cathode, V_{tAX} denotes a discharge starting threshold voltage between the address electrodes and the X electrodes, and V_{tYX} denotes a discharge starting threshold voltage between the Y electrodes and the X electrodes, and

the plasma display panel satisfies the following relational expression:

$$V_{tAY} + V_{tXA} - V_{tXY} > 0 \text{ or}$$

$$V_{tYA} + V_{tAX} - V_{tYX} > 0.$$

5. (CANCELLED)

6. (CANCELLED)

7. (CANCELLED)

8. (CANCELLED)

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9. (CANCELLED)

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11. (CANCELLED)

12. (CANCELLED)

13. (CANCELLED)

14. (CANCELLED)

15. (CANCELLED)

16. (PREVIOUSLY PRESENTED) A method of driving a plasma display panel including a plurality of X electrodes and a plurality of Y electrodes arranged in alternating, spaced relationship on a base plate and a plurality of address electrodes spaced from and crossing the X and Y electrodes, comprising:

generating initializing discharges with at least one ramp waveform voltage applied between the X electrodes and Y electrodes during an initializing period;

generating addressing discharges between the Y electrodes and the address electrodes during an addressing period; and

generating sustaining discharges between the X electrodes and the Y electrodes during a sustaining period, said initializing period, said addressing period and said sustaining period cyclically recurring,

wherein the voltage of a driving waveform for each electrode satisfies the following relational expression:

$$2V_{iAY} - V_{iXY} \leq 2V_{AY} - V_{XY} - 2V_{aoff}$$

wherein V_{iAY} denotes a discharge starting threshold voltage between the address electrodes and the Y electrodes, and V_{iXY} denotes a discharge starting threshold voltage between the X electrodes and the Y electrodes when the Y electrodes serve as cathodes,

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wherein V_{AY} denotes a voltage applied between the address electrodes and the Y electrodes, and V_{XY} denotes a voltage applied between the X electrodes and the Y electrodes at the trailing edge of the ramp waveform at the end of the initializing period,

wherein V_{aoff} denotes an offset voltage of the voltage applied between the address electrodes and the Y electrodes at the end of sustaining period, and

wherein during the at least one ramp waveform voltage applied to the Y electrode during an initializing period, a voltage opposite to the ramp waveform voltage is applied on the X electrode and which is not applied to the ramp waveform.